

### REMARKS

Claims 53-59, 64-66, 68, and 69 are pending in the application. Claims 1-52, 60-63, and 67 have been cancelled without prejudice. Claims 53, 56, 64, 65, and 68 have been amended. The title of the application has been amended to reflect the subject matter of the pending claims. The first page of the specification has been amended to update the status of the priority applications. Support for the amendments can be found in the specification at, e.g., page 15, lines 3-24; page 17, lines 5-16; page 38, line 27, to page 43, line 8; and page 115, lines 21-26. These amendments add no new matter.

#### Priority Information

At page 3 of the Office Action, the Examiner requested that the first page of the specification be amended to reflect the status of priority application numbers 10/301,056 and 09/383,551. The specification has been amended to refer to the abandonment of application number 10/301,056 and recite the number and issue date of the patent granted for application number 09/383,551.

#### Priority

At pages 3-4 of the Office Action, the Examiner asserted that priority application USSN 09/383,551 does not provide adequate support under 35 U.S.C. § 112 for claims 53-69.

Applicants respectfully traverse the rejection in view of the claim amendments and the following comments.

A patent specification must describe an invention in sufficient detail so that one skilled in the art "can clearly conclude that the inventor invented the claimed invention." Lockwood v. American Airlines, Inc., 107 F.3d 1565, 1571 (Fed. Cir. 1997). The purpose of the written description requirement is to "ensure that the scope of the right to exclude, as set forth in the claims, does not overreach the scope of the inventor's contribution to the field of art as described in the patent specification." University of Rochester v. G. D. Searle & Co., Inc., 358 F.3d 916, 920 (Fed. Cir. 2004), quoting Reffin v. Microsoft Corp., 214 F.3d 1342, 1345 (Fed. Cir. 2000).

Compliance with the written description requirement is a fact-based inquiry that varies depending upon the nature of the invention claimed. Enzo Biochem, Inc. v. Gen-Probe Inc., on rehearing 323 F.3d 956, 963 (Fed. Cir. 2002). The subject matter of a claim need not be described in the specification *in haec verba* in order for the disclosure to satisfy the written description requirement. Purdue Pharma L.P. v. Faulding Inc., 230 F.3d 1320, 1323 (Fed. Cir. 2000); see also In re Wilder, 736 F.2d 1516, 1520 (Fed. Cir. 1984) (stating that “[i]t is not necessary that the claimed subject matter be described identically, but the disclosure originally filed must convey to those skilled in the art that applicant had invented the subject matter later claimed”). Newly added claims may be supported in the specification through express, implicit, or inherent disclosure that allows persons of ordinary skill in the art to recognize that the inventor invented what is claimed. MPEP § 2163.

Amended independent claim 53 is directed to a method of identifying a substance that interacts with a polypeptide comprising an extracellular region (or a variant thereof in which one to ten amino acid residues are substituted, deleted or added) of the human JTT-1 protein of SEQ ID NO:2. The following passage reproduced from the specification (at page 115, line 21 to 26) contributes to the written description support for the claim.

The genes (DNA), polypeptides, polypeptide fragments and antibodies of the present invention are useful not only as pharmaceuticals but also as reagents for searching molecules (ligands) interacting with the cell surface molecules of the present invention, clarifying the function of the ligand, and developing drugs targeting the ligands.

The foregoing passage states that the polypeptides and polypeptide fragments of the invention are useful as reagents for searching for molecules that interact with the cell surface molecules of the invention.

As detailed below in response to the written description rejection, claim 53 has been amended to require that the purified polypeptide used in the claimed method contain an extracellular region (or a variant thereof in which one to ten amino acid residues are substituted, deleted or added) of the human JTT-1 polypeptide of SEQ ID NO:2. The purified polypeptide recited in amended claim 53 constitutes a “polypeptide of the invention” (JTT-1 polypeptides

and fragments and variants thereof are described in the specification at, e.g., page 15, lines 3-24, page 17, lines 5-16, and page 38, line 27, to page 43, line 8).

Amended claim 53 contains steps of contacting the polypeptide with a test substance and determining whether the test substance interacts with the polypeptide. These methods steps are fundamental to screening protocols using purified polypeptides and are implicit in the specification's description of use of the polypeptides in searching for molecules that interact with the cell surface molecules of the invention.

Persons of ordinary skill in the art reading the above-cited passages from the specification would readily understand the specification to describe the use of the polypeptide recited in claim 53 in methods of identifying a substance that interacts with the polypeptide. The disclosure readily conveys to those skilled in the art that, as of the filing date of prior application USSN 09/383,551, the inventors had invented and were in possession of the currently claimed method.<sup>1</sup> The claim in no way overreaches the scope of the inventors' contribution to the field as described in the prior application.

In view of the foregoing comments, applicants respectfully submit that independent claim 53 and the claims that depend therefrom are fully supported in the specification as filed and should be accorded the priority date of prior application USSN 09/383,551.

#### Title to the Application

At page 4 of the Office Action, the Examiner asserted that the title is not descriptive of the pending claims and requested that a new title be provided. In response to this objection, the title has been amended to "METHODS OF IDENTIFYING SUBSTANCES THAT INTERACT WITH JTT-1 PROTEIN."

#### Objection to Specification

At page 5 of the Office Action, the Examiner objected to the specification as allegedly failing to provide antecedent basis for the claimed subject matter. Written description support

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<sup>1</sup> The specification of the present application is identical to that of prior application USSN 09/383,551.

for the claimed methods is detailed in the preceding section of this response entitled "Priority." In view of support for the claims contained in the specification, no amendment to the specification is required. Applicants request that the Examiner withdraw the present objection.

35 U.S.C. §112, Second Paragraph (Indefiniteness)

At page 5 of the Office Action, the Examiner rejected claims 60-63 and 67 as allegedly indefinite. Claims 60-63 and 67 have been cancelled without prejudice, thereby obviating the present rejection.

35 U.S.C. §112, First Paragraph (Written Description)

At pages 6-7 of the Office Action, the Examiner rejected claims 53-55 and 57-63 as allegedly containing subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors had possession of the claimed invention at the time the application was filed. According to the Examiner, "Applicant is not in possession of a generically recited 'JTT-1 antigen.'"

Claim 53 has been amended to require that the polypeptide used in the claimed method contain: (a) an extracellular region of the polypeptide set forth in SEQ ID NO:2, or (b) an extracellular region of a polypeptide that consists of the amino acid sequence of SEQ ID NO:2 in which one to ten amino acid residues are substituted, deleted or added, wherein the polypeptide comprises the amino acid sequence Phe-Asp-Pro-Pro-Pro-Phe (SEQ ID NO:21) and inhibits the activation of lymphocytes. The components of the polypeptide recited in amended claim 53 are the same as those recited in allowed claim 81 of corresponding patent application number 09/561,308. It is applicants' understanding that the amendment of claim 53 to recite structural or structural/functional features of the human JTT-1 polypeptide overcomes the present written description rejection.

In view of the foregoing, applicants respectfully request that the Examiner withdraw the rejection of independent claim 53 and the claims that depend therefrom.

### 35 U.S.C. §103(a) (Obviousness)

At pages 8-9 of the Office Action, the Examiner rejected claims 53-69 as allegedly obvious over Tamatani et al., U.S. Published Application No. 20020115831 ("Tamatani").

Tamatani belongs to the same patent family as the present application and claims priority to USSN 09/383,551. As detailed herein, independent claim 53 and the claims that depend therefrom are entitled to the priority date of prior application USSN 09/383,551. As a result, Tamatani does not constitute prior art against any of the pending claims. Applicants respectfully request that the Examiner withdraw the rejection.

### Obviousness-Type Double Patenting

At page 10 of the Office Action, the Examiner provisionally rejected claims 53-69 under the judicially created doctrine of obviousness-type double patenting as allegedly unpatentable over claims 1-24 of co-pending and commonly assigned application serial number 10/800,250.

The allegedly conflicting claims of application serial number 10/800,250 have not been patented. For this reason, the present rejection is a provisional obviousness-type double patenting rejection. In view of the amendments and remarks presented herein, it is applicants understanding that the provisional obviousness-type double patenting rejection is the only rejection remaining in the present application. Accordingly, the double patenting rejection should be withdrawn to permit the present application to issue as a patent. See MPEP § 804.I.B. Because application serial number 10/800,250 has not issued as a patent, no terminal disclaimer is required for the present application. Applicants respectfully request that the Examiner withdraw the rejection.

### Common Ownership of Applications

At page 11 of the Office Action, the Examiner alleged that claims 53-69 are directed to an invention not patentably distinct from claims 1-24 of co-pending and commonly assigned application serial number 10/800,250. In addition, the Examiner stated that the commonly assigned application would form the basis of a rejection under 35 U.S.C. § 103(a) if the

application qualified as prior art under 35 U.S.C. § 102(e), (f), or (g) and the allegedly conflicting inventions were not commonly owned at the time the invention in this application was made.

As detailed in the enclosed statement under 37 C.F.R. § 1.78(c), the present application and U.S. Patent Application No. 10/800,250 were owned by or subject to an obligation of assignment to Japan Tobacco Inc. at the time the inventions disclosed and claimed in the respective applications were made. The enclosed statement precludes a rejection under 35 U.S.C. § 103(a) based upon the use of the foregoing commonly assigned patents and applications as references under 35 U.S.C. § 102(e), (f), or (g).

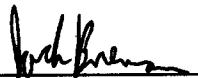
#### CONCLUSION

Applicants submit that all grounds for rejection have been overcome, and that all claims are in condition for allowance, which action is earnestly requested.

Please apply any charges or credits to Deposit Account No. 06-1050, referencing Attorney Docket No. 14539-004012.

Respectfully submitted,

Date: October 13, 2006

  
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

|              |   |             |                   |
|--------------|---|-------------|-------------------|
| Applicant :  | Takuya Tamatani et al.  | Art Unit :  | 1644              |
| Serial No. : | 10/721,404  | Examiner :  | Ilia I. Ouspenski |
| Filed :      | November 25, 2003   | Conf. No. : | 1646              |
| Title :      | CELL SURFACE MOLECULE MEDIATING CELL ADHESION AND SIGNAL TRANSMISSION |             |                   |

**Mail Stop Amendment**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

STATEMENT UNDER 37 C.F.R. § 1.78(C)

I am authorized to act on behalf of Japan Tobacco Inc.

I understand that Japan Tobacco Inc. is the assignee of application serial number 10/800,250, filed March 10, 2004, by virtue of an assignment signed by all of the inventors and recorded in the United States Patent and Trademark Office on June 7, 2001, at Reel 011878, Frame 0923.

I further understand that Japan Tobacco Inc. is the assignee of the present application (serial number 10/721,404) by virtue of an assignment signed by all of the inventors and recorded in the United States Patent and Trademark Office on November 26, 1999, at Reel 010426, Frame 0918.

I hereby state, pursuant to 37 C.F.R. § 1.78(c), that the present application and U.S. Patent Application No. 10/800,250 were owned by or subject to an obligation of assignment to Japan Tobacco Inc. at the time the inventions disclosed and claimed in the respective patents and applications were made.

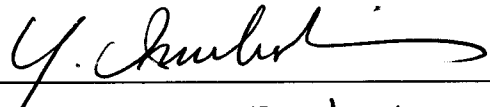
Applicant : Takuya Tamatani et al.  
Serial No. : 10/721,404  
Filed : November 25, 2003  
Page : 2 of 2

Attorney's Docket No.: 14539-004012 / JF-52US-D5-C2

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

JAPAN TOBACCO INC.

Date: 10/3/06

  
By: Yoshinori Inubushi

Title: Vice President, Intellectual Property